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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,087	01/28/2004	Young Choi	45657	9814
1609	7590	03/15/2006	EXAMINER	
ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P. 1300 19TH STREET, N.W. SUITE 600 WASHINGTON,, DC 20036			CAI, WAYNE HUU	
			ART UNIT	PAPER NUMBER
			2681	

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,087

Applicant(s)

CHOI ET AL.

Examiner

Wayne Cai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8 and 10-12 is/are rejected.
- 7) ☒ Claim(s) 3 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is in response to Amendment dated 02/23/2006.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Mizuta et al. (hereinafter "Mizuta") (US 2003/0064758 A1).

Regarding claim 1, Mizuta discloses a method for detecting a folder position in a rotation touch phone having a camera, the rotation touch phone including a sensor section (fig. 6, elements 111a-c), a folder, a body, and a connecting section, the folder having a magnet (fig. 6, elements 204a & 204b), the sensor section including first, second and third sensors for detecting the magnet (i.e., sensors 111a-c), the first and second sensors being located on the body and the third sensor being located on the connecting section, the connecting section connecting the folder to the body, the folder being movable from first, second, third and fourth states, the first state signifying a state in which the folder is initially closed (fig. 3B), the second state signifying a state in which the folder has been opened from the first state (fig. 3A), the third state signifying a state

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in which the folder has been rotated substantially 180 degrees from the second state (fig. 3A), the fourth state signifying a state in which the folder has been closed from the third state (fig. 3C), wherein the orientation of the folder with respect to the body in the fourth state is different that the orientation of the folder with respect to the body in the first state (figs. 3B & 3C), the method comprising the steps of:

- i) receiving a signal from the sensor section notifying that the sensor section detects the magnet (paragraphs 0105-0107);
- ii) deciding that the folder is in at least one of the first to fourth states, based on the signal input from the sensor section (paragraphs 0105-107).

Regarding claim 2, Mizuta discloses the method as claimed in claim 1 as described above, except for wherein step i) includes the steps of:

- a) transferring a signal notifying that the first sensor detects the magnet (paragraphs 0105-0107);
- b) transferring a signal notifying that the second sensor detects the magnet (paragraphs 0105-0107);
- c) transferring a signal notifying that the third sensor detects the magnet (paragraphs 0105-0107).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Opela et al. (hereinafter "Opela") (US 2004/0204122 A1) in view of Mizuta.

Regarding claims 4, and 10, Opela discloses a method, and a controller for converting a mode of a rotation touch phone having a camera into a speakerphone mode by detecting a folder position, the rotation touch phone including a sensor section, a folder, a body, and a connecting section, the folder having a magnet and a bi-directional speakerphone, the sensor section including first, second and third sensors for detecting the magnet, the first and second sensors being located on the body and the third sensor being located on the connecting section, the connecting section having the camera and connecting the folder to the body, the folder being movable from first, second, third and fourth states, the first state signifying a state in which the folder is initially closed, the second state signifying a state in which the folder has been opened from the first state, the third state signifying a state in which the folder has been rotated substantially 180 degrees from the second state, the fourth state signifying a state in which the folder has been closed from the third state, wherein the orientation of the folder with respect to the body in the fourth state is different that the orientation of the folder with respect to the body in the first state, the method comprising the steps of (see rejection of claim 1):

i) converting the mode of the rotation touch phone into the speakerphone mode when the first sensor detects the magnet, which represents that the folder is in the first state in which the folder is closed (paragraph 0026);

Even though Opela does not disclose ii) converting the mode of the rotation touch phone into the speakerphone mode when the second sensor detects the magnet, which represents that the folder is in the fourth state in which the folder is closed by being rotated from the third state. On the other hand, Mizuta discloses a foldable portable information terminal. Mizuta also discloses wherein the folder is in the fourth state in which the folder is closed by being rotated from the third state (figs 3A-C).

Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Opela with Mizuta to arrive at the invention so that user would be able to utilize the second display in addition with the speaker phone function.

5. Claims 5-8, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuta in view of Aagaard et al. (hereinafter "Aagaard") (US 6,839,576 B2).

Regarding claims 5, and 11, Mizuta discloses a method, and a controller for utilizing first and second display sections as an illumination source when photographing an object by detecting a position of a folder in a rotation touch phone having a rotatable camera, the rotation touch phone including a sensor section, a folder, a body, and a connecting section, the folder having a magnet and the first and second display sections, the sensor section including first, second, and third sensors for detecting the magnet, the first and second sensors being located on the body and the third sensor being located on the connecting section, the connecting section connecting the folder to

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the body and having the camera, the folder being movable from first, second, third and fourth states, the first state signifying a state in which the folder is initially closed, the second state signifying a state in which the folder has been opened from the first state, the third state signifying a state in which the folder has been rotated substantially 180 degrees from the second state, the fourth state signifying a state in which the folder has been closed from the third state, wherein the orientation of the folder with respect to the body in the fourth state is different that the orientation of the folder with respect to the body in the first state (refer to rejection of claim 1), the method comprising the steps of:

i) deciding that the folder is in at least one of the first to fourth states, when the sensor section inputs a signal notifying that the sensor section detects the magnet (paragraphs 0105-0107).

Mizuta, however, fails to disclose:

ii) utilizing at least one of the first and second display sections as the illumination source when the folder is in at least one of the second and third states.

In a similar endeavor, Aagaard discloses a multiple axis hinge assembly. Aagaard further discloses ii) utilizing at least one of the first and second display sections as the illumination source when the folder is in at least one of the second and third states (col. 4, lines 30-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mizuta's foldable portable information terminal by having the illumination source so that user could easily see information.

Regarding claims 6, and 12, Mizuta and Aagaard disclose the method, and the controller as claimed in claims 5, and 11. Even though the cited arts do not specifically teach or describe wherein step ii) includes the steps of: a) utilizing the second display section as the illumination source when the folder is in the second state; b) utilizing the first display section as the illumination source when the folder is in the third state. Since Aagaard does teach the controllable backlighting (col. 4, lines 45-56) using only one display, and Mizuta does teach first and second display (see fig. 6). Thus, it would have been obvious to one skilled in the art to combine the cited arts to design such that either the first or the second display could be used as the light source. One skilled in the art would modify as claimed so that user would be able to utilize the light source regardless the position of the phone.

Regarding claim 7, Aagaard discloses a rotation touch phone (col. 3, lines 58-67) comprising:

- a camera adapted to take pictures for the rotation touch phone (col. 3, lines 51-57);
- a folder adapted to move from first, second, third and fourth states, the first state signifying a state in which the folder section is initially closed (col. 3, lines 15-20), the second state signifying a state in which the folder section has been opened from the first state (fig. 4), the third state signifying a state in which the folder section has been rotated substantially 180 degrees from the second state (fig. 5), the fourth state signifying a state in which the folder section has been closed from the

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third state (figs. 6 & 7), the magnet being disposed on the connector 903 which is part of folder section;

- a controller (fig. 10, element 1035; and its descriptions) adapted to receive a signal from the sensor section indicating that the sensor section detects the magnet (col. 6, lines 37-48); and decide that the folder section is in at least one of the first to fourth states, based on the signal input from the sensor section (col. 5, line 52 – col. 6, line 48).

Aagaard, however, fails to disclose:

- first and second display sections adapted to input and output information for the rotation touch phone;

In a similar endeavor, Mizuta teaches a foldable portable information terminal.

Mizuta also discloses:

- first and second display sections adapted to input and output information for the rotation touch phone (fig. 6, elements 202 & 206);

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify and incorporate Aagaard's invention with Mizuta's first and second display so that user would be able to use either one of those two displays regardless the position (i.e., open or close) of the phone.

Regarding claim 8, Aagaard and Mizuta both disclose the apparatus of claim 7 as described above. Mizuta also discloses wherein the controller is further adapted to transfer a signal indicating that the first sensor detects the magnet (paragraphs 0105-0107); transfer a signal indicating that the second sensor detects the magnet

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(paragraphs 0105-0107); and transfer a signal indicating that the third sensor detects the magnet (paragraphs 0105-0107).

Allowable Subject Matter

6. Claims 3, and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kim (US 6,999,802 B2)

Ku (US 6,266,236 B1)

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Cai whose telephone number is (571) 272-7798. The examiner can normally be reached on Monday-Friday; 9:00-6:00; alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wayne Cai
Examiner
Art Unit 2681



ERIKA A. GARRY
PRIMARY EXAMINER